

WOODLAND MANAGEMENT AND PRODUCTIVITY

(Only the soils suitable for production of commercial trees are listed)

Gerstle River Area, Alaska: Detailed Soil Map Legend

Map symbol and soil name (% of map unit)	Ordi- nation symbol	Management concerns					Potential productivity			Suggested trees to plant
		Erosion hazard	Equip- ment limita- tion	Seedling mortal- ity	Wind- throw hazard	Plant competi- tion	Common trees	Site index	Volume of wood fiber m3/ha	
201:										
AQUIC EUTROCRYEPTS (45%)	2D	Moderate	Moderate	Moderate	Moderate	Moderate	black spruce-----	---	---	---
TANACROSS (40%)-----	1W	Severe	Severe	Severe	Moderate	Moderate	black spruce-----	---	---	---
wet soils without permafrost (10%)-----	---	---	---	---	---	---	-----	---	---	---
202:										
AQUIC EUTROCRYEPTS (55%)	---	---	---	---	---	---	black spruce----- tamarack----- white spruce-----	--- --- ---	--- --- ---	---
TYPIC CRYAQUEPTS (30%)--	---	---	---	---	---	---	black spruce----- tamarack-----	--- ---	--- ---	---
short steep channel sideslopes (5%)-----	---	---	---	---	---	---	-----	---	---	---
drier soils on high spots (2%)-----	---	---	---	---	---	---	-----	---	---	---
203:										
AQUIC CRYOFLUENTS (60%)	2A	Slight	Moderate	Slight	Moderate	Slight	balsam poplar----- black spruce----- paper birch----- tamarack----- white spruce-----	--- --- --- --- 71	--- --- --- --- 2	---
TYPIC CRYAQUENTS (25%)--	---	---	---	---	---	---	-----	---	---	---

WOODLAND MANAGEMENT AND PRODUCTIVITY--Continued
Gerstle River Area, Alaska: Detailed Soil Map Legend

Map symbol and soil name (% of map unit)	Ordi- nation symbol	Management concerns					Potential productivity			Suggested trees to plant
		Erosion hazard	Equip- ment limita- tion	Seedling mortal- ity	Wind- throw hazard	Plant competi- tion	Common trees	Site index	Volume of wood fiber	
									m3/ha	
Salchaket (15%)-----	2A	Slight	Slight	Slight	Moderate	Slight	balsam poplar----- black spruce----- paper birch----- quaking aspen----- white spruce-----	--- --- --- --- 80	--- --- --- --- 2	---
204: BEALES (60%)-----	2R	Severe	Moderate	Severe	Severe	Slight	balsam poplar----- black spruce----- paper birch----- quaking aspen----- white spruce-----	--- --- --- --- 72	--- --- --- --- 2	---
LUPINE (30%)-----	2D	Slight	Slight	Slight	Moderate	Slight	balsam poplar----- black spruce----- paper birch----- quaking aspen----- white spruce-----	--- --- --- --- 72	--- --- --- --- 2	---
wetter soils in depressions (10%)-----	---	---	---	---	---	---	-----	---	---	---
205: CRYOFLUVENTS (85%)-----	---	---	---	---	---	---	-----	---	---	---
frequently flooded areas (10%)-----	---	---	---	---	---	---	-----	---	---	---
rarely flooded areas (5%)-----	---	---	---	---	---	---	-----	---	---	---
206: CRYOFLUVENTS (90%)-----	2A	Slight	Slight	Slight	Moderate	Slight	balsam poplar----- black spruce----- paper birch----- white spruce-----	--- --- --- ---	--- --- --- ---	---

WOODLAND MANAGEMENT AND PRODUCTIVITY--Continued
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Map symbol and soil name (% of map unit)	Ordi- nation symbol	Management concerns					Potential productivity			Suggested trees to plant
		Erosion hazard	Equip- ment limita- tion	Seedling mortal- ity	Wind- throw hazard	Plant competi- tion	Common trees	Site index	Volume of wood fiber m3/ha	
occasionally flooded areas (5%)-----	---	---	---	---	---	---	-----	---	---	---
wetter soils in depressions (5%)-----	---	---	---	---	---	---	-----	---	---	---
207: DONNELLY (85%)-----	---	Slight	Severe	Moderate	Moderate	Slight	black spruce----- quaking aspen----- white spruce-----	--- --- ---	--- --- ---	---
flooded areas (5%)-----	---	---	---	---	---	---	-----	---	---	---
208: GERSTLE (85%)-----	2A	Slight	Slight	Slight	Moderate	Slight	black spruce----- quaking aspen----- white spruce-----	--- --- 82	--- --- 2	---
thick silty soils (5%)--	---	---	---	---	---	---	-----	---	---	---
Jarvis (3%)-----	2A	Slight	Slight	Slight	Moderate	Slight	paper birch----- quaking aspen----- white spruce-----	50 60 80	2 4 2	white spruce
Salchaket (3%)-----	2A	Slight	Slight	Slight	Moderate	Slight	balsam poplar----- black spruce----- paper birch----- quaking aspen----- white spruce-----	--- --- --- --- 80	--- --- --- --- 2	---
Beales (2%)-----	2R	Severe	Moderate	Severe	Severe	Slight	balsam poplar----- black spruce----- paper birch----- quaking aspen----- white spruce-----	--- --- --- --- 72	--- --- --- --- 2	---

WOODLAND MANAGEMENT AND PRODUCTIVITY--Continued
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Map symbol and soil name (% of map unit)	Ordi- nation symbol	Management concerns					Potential productivity			Suggested trees to plant
		Erosion hazard	Equip- ment limita- tion	Seedling mortal- ity	Wind- throw hazard	Plant competi- tion	Common trees	Site index	Volume of wood fiber m3/ha	
short steep channel sideslopes (2%)-----	---	---	---	---	---	---	-----	---	---	---
209: TYPIC HISTOTURBELS (60%)	1W	Severe	Severe	Severe	Severe	Severe	black spruce----- paper birch----- white spruce-----	--- --- ---	--- --- ---	---
HISTOSOLS (30%)-----	---	---	---	---	---	---	-----	---	---	---
210: HISTOSOLS (45%)-----	---	---	---	---	---	---	-----	---	---	---
LISCUM (40%)-----	---	---	---	---	---	---	black spruce----- tamarack-----	--- ---	--- ---	---
Jarvis (5%)-----	2A	Slight	Slight	Slight	Moderate	Slight	paper birch----- quaking aspen----- white spruce-----	50 60 80	2 4 2	white spruce
wet soils with permafrost (5%)-----	---	---	---	---	---	---	-----	---	---	---
drier soils on high spots (2%)-----	---	---	---	---	---	---	-----	---	---	---
211: IKSGIZA (85%)-----	1W	Severe	Severe	Severe	Moderate	Moderate	black spruce-----	---	---	---
wetter soils in depressions (5%)-----	---	---	---	---	---	---	-----	---	---	---

WOODLAND MANAGEMENT AND PRODUCTIVITY--Continued
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Map symbol and soil name (% of map unit)	Ordi- nation symbol	Management concerns					Potential productivity			Suggested trees to plant
		Erosion hazard	Equip- ment limita- tion	Seedling mortal- ity	Wind- throw hazard	Plant competi- tion	Common trees	Site index	Volume of wood fiber m3/ha	
212: JARVIS (85%)-----	2D	Slight	Slight	Slight	Moderate	Slight	balsam poplar----- black spruce----- paper birch----- quaking aspen----- white spruce-----	--- --- --- --- 80	--- --- --- --- 2	white spruce
Chena (5%)-----	1F	Slight	Slight	Severe	Severe	Slight	balsam poplar----- paper birch----- quaking aspen----- white spruce-----	--- --- --- ---	--- --- --- ---	---
Salchaket (5%)-----	2A	Slight	Slight	Slight	Moderate	Slight	balsam poplar----- black spruce----- paper birch----- quaking aspen----- white spruce-----	--- --- --- --- 80	--- --- --- --- 2	---
short steep channel sideslopes (5%)-----	---	---	---	---	---	---	-----	---	---	---
213: JARVIS (85%)-----	2A	Slight	Slight	Slight	Moderate	Slight	paper birch----- quaking aspen----- white spruce-----	50 60 80	2 4 2	white spruce
Salchaket (5%)-----	2A	Slight	Slight	Slight	Moderate	Slight	balsam poplar----- black spruce----- paper birch----- quaking aspen----- white spruce-----	--- --- --- --- 80	--- --- --- --- 2	---
short steep channel sideslopes (5%)-----	---	---	---	---	---	---	-----	---	---	---

WOODLAND MANAGEMENT AND PRODUCTIVITY--Continued
Gerstle River Area, Alaska: Detailed Soil Map Legend

Map symbol and soil name (% of map unit)	Ordi- nation symbol	Management concerns					Potential productivity			Suggested trees to plant
		Erosion hazard	Equip- ment limita- tion	Seedling mortal- ity	Wind- throw hazard	Plant competi- tion	Common trees	Site index	Volume of wood fiber	
									m3/ha	
Chena (3%)-----	1F	Slight	Slight	Severe	Severe	Slight	balsam poplar----- paper birch----- quaking aspen----- white spruce-----	--- --- --- ---	--- --- --- ---	---
occasionally flooded areas (2%)-----	---	---	---	---	---	---	-----	---	---	---
214: JARVIS (50%)-----	2D	Slight	Slight	Slight	Moderate	Slight	balsam poplar----- black spruce----- paper birch----- quaking aspen----- white spruce-----	--- --- --- --- 80	--- --- --- --- 2	white spruce
CHENA (35%)-----	1F	Slight	Slight	Severe	Severe	Slight	balsam poplar----- paper birch----- quaking aspen----- white spruce-----	--- --- --- ---	--- --- --- ---	---
Beales (5%)-----	2R	Severe	Moderate	Severe	Severe	Slight	balsam poplar----- black spruce----- paper birch----- quaking aspen----- white spruce-----	--- --- --- --- 72	--- --- --- --- 2	---
occasionally flooded areas (5%)-----	---	---	---	---	---	---	-----	---	---	---
short steep channel sideslopes (3%)-----	---	---	---	---	---	---	-----	---	---	---
Salchaket (2%)-----	2A	Slight	Slight	Slight	Moderate	Slight	balsam poplar----- black spruce----- paper birch----- quaking aspen----- white spruce-----	--- --- --- --- 80	--- --- --- --- 2	---

WOODLAND MANAGEMENT AND PRODUCTIVITY--Continued
Gerstle River Area, Alaska: Detailed Soil Map Legend

Map symbol and soil name (% of map unit)	Ordi- nation symbol	Management concerns					Potential productivity			Suggested trees to plant
		Erosion hazard	Equip- ment limita- tion	Seedling mortal- ity	Wind- throw hazard	Plant competi- tion	Common trees	Site index	Volume of wood fiber m3/ha	
215: KOYUKUK (85%)-----	2R	Moderate	Moderate	Slight	Moderate	Moderate	black spruce----- paper birch----- quaking aspen----- white spruce-----	--- 60 --- 83	--- 3 --- 2	---
Jarvis (5%)-----	2A	Slight	Slight	Slight	Moderate	Slight	paper birch----- quaking aspen----- white spruce-----	50 60 80	2 4 2	white spruce
slopes greater than 15 percent (5%)-----	---	---	---	---	---	---	-----	---	---	---
wet soils with permafrost (5%)-----	---	---	---	---	---	---	-----	---	---	---
216: LISCUM (45%)-----	0W	Severe	Severe	Severe	Moderate	Severe	black spruce----- tamarack-----	--- ---	--- ---	---
MOSQUITO (45%)-----	0W	Severe	Severe	Severe	Moderate	Severe	black spruce----- paper birch----- tamarack-----	--- --- ---	--- --- ---	---
Histosols (5%)-----	---	---	---	---	---	---	-----	---	---	---
drier soils in higher areas (5%)-----	---	---	---	---	---	---	-----	---	---	---
217: LUPINE (85%)-----	2D	Slight	Slight	Slight	Moderate	Slight	balsam poplar----- black spruce----- paper birch----- quaking aspen----- white spruce-----	--- --- --- --- 72	--- --- --- --- 2	---

WOODLAND MANAGEMENT AND PRODUCTIVITY--Continued
Gerstle River Area, Alaska: Detailed Soil Map Legend

Map symbol and soil name (% of map unit)	Ordi- nation symbol	Management concerns					Potential productivity			Suggested trees to plant
		Erosion hazard	Equip- ment limita- tion	Seedling mortal- ity	Wind- throw hazard	Plant competi- tion	Common trees	Site index	Volume of wood fiber	
									m3/ha	
Chena (5%)-----	1F	Slight	Slight	Severe	Severe	Slight	balsam poplar----- paper birch----- quaking aspen----- white spruce-----	--- --- --- ---	--- --- --- ---	---
Salchaket (5%)-----	2A	Slight	Slight	Slight	Moderate	Slight	balsam poplar----- black spruce----- paper birch----- quaking aspen----- white spruce-----	--- --- --- --- 80	--- --- --- --- 2	---
short steep channel sideslopes (3%)-----	---	---	---	---	---	---	-----	---	---	---
Jarvis (2%)-----	2A	Slight	Slight	Slight	Moderate	Slight	paper birch----- quaking aspen----- white spruce-----	50 60 80	2 4 2	white spruce
218: LUPINE (45%)-----	2D	Slight	Slight	Slight	Moderate	Slight	balsam poplar----- black spruce----- paper birch----- quaking aspen----- white spruce-----	--- --- --- --- 72	--- --- --- --- 2	---
MOOSEHEAD (40%)-----	2A	Slight	Slight	Slight	Moderate	Slight	balsam poplar----- black spruce----- paper birch----- quaking aspen----- white spruce-----	--- --- --- --- 82	--- --- --- --- 2	---
Chena (5%)-----	1F	Slight	Slight	Severe	Severe	Slight	balsam poplar----- paper birch----- quaking aspen----- white spruce-----	--- --- --- ---	--- --- --- ---	---

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Map symbol and soil name (% of map unit)	Ordi- nation symbol	Management concerns					Potential productivity			Suggested trees to plant
		Erosion hazard	Equip- ment limita- tion	Seedling mortal- ity	Wind- throw hazard	Plant competi- tion	Common trees	Site index	Volume of wood fiber m3/ha	
Salchaket (5%)-----	2A	Slight	Slight	Slight	Moderate	Slight	balsam poplar----- black spruce----- paper birch----- quaking aspen----- white spruce-----	--- --- --- --- 80	--- --- --- --- 2	---
wetter soils in depressions (5%)-----	---	---	---	---	---	---	-----	---	---	---
219: MOOSEHEAD (85%)-----	2A	Slight	Slight	Slight	Moderate	Slight	balsam poplar----- black spruce----- paper birch----- quaking aspen----- white spruce-----	--- --- --- --- 82	--- --- --- --- 2	---
Chena (5%)-----	1F	Slight	Slight	Severe	Severe	Slight	balsam poplar----- paper birch----- quaking aspen----- white spruce-----	--- --- --- ---	--- --- --- ---	---
Salchaket (5%)-----	2A	Slight	Slight	Slight	Moderate	Slight	balsam poplar----- black spruce----- paper birch----- quaking aspen----- white spruce-----	--- --- --- --- 80	--- --- --- --- 2	---
Beales (3%)-----	2R	Severe	Moderate	Severe	Severe	Slight	balsam poplar----- black spruce----- paper birch----- quaking aspen----- white spruce-----	--- --- --- --- 72	--- --- --- --- 2	---
wetter soils in channels (2%)-----	---	---	---	---	---	---	-----	---	---	---

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Map symbol and soil name (% of map unit)	Ordination symbol	Management concerns					Potential productivity			Suggested trees to plant
		Erosion hazard	Equip- ment limita- tion	Seedling mortal- ity	Wind- throw hazard	Plant competi- tion	Common trees	Site index	Volume of wood fiber m3/ha	
220: MOSQUITO (90%)-----	0W	Severe	Severe	Severe	Moderate	Severe	black spruce----- paper birch----- tamarack-----	--- --- ---	--- --- ---	---
Histosols on hummocks (5%)-----	---	---	---	---	---	---	-----	---	---	---
221: RIVERWASH (95%)-----	---	---	---	---	---	---	-----	---	---	---
water (3%)-----	---	---	---	---	---	---	-----	---	---	---
Chena (2%)-----	1F	Slight	Slight	Severe	Severe	Slight	balsam poplar----- paper birch----- quaking aspen----- white spruce-----	--- --- --- ---	--- --- --- ---	---
222: SALCHAKET (90%)-----	2A	Slight	Slight	Slight	Moderate	Slight	balsam poplar----- black spruce----- paper birch----- quaking aspen----- white spruce-----	--- --- --- --- 80	--- --- --- --- 2	---
Chena (2%)-----	1F	Slight	Slight	Severe	Severe	Slight	balsam poplar----- paper birch----- quaking aspen----- white spruce-----	--- --- --- ---	--- --- --- ---	---
Jarvis (2%)-----	2A	Slight	Slight	Slight	Moderate	Slight	paper birch----- quaking aspen----- white spruce-----	50 60 80	2 4 2	white spruce
flooded soils (2%)-----	---	---	---	---	---	---	-----	---	---	---

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		Erosion hazard	Equip- ment limita- tion	Seedling mortal- ity	Wind- throw hazard	Plant competi- tion	Common trees	Site index	Volume of wood fiber m3/ha	
wet soils in channels (2%)-----	---	---	---	---	---	---	-----	---	---	---
Gerstle (1%)-----	2A	Slight	Slight	Slight	Moderate	Slight	black spruce----- quaking aspen----- white spruce-----	82	2	---
short steep channel sideslopes (1%)-----	---	---	---	---	---	---	-----	---	---	---
223: TANACROSS (90%)-----	---	---	---	---	---	---	black spruce-----	---	---	---
Mosquito (2%)-----	0W	Severe	Severe	Severe	Moderate	Severe	black spruce----- paper birch----- tamarack-----	---	---	---
224: TANACROSS (85%)-----	---	---	---	---	---	---	black spruce-----	---	---	---
225: TETLIN (85%)-----	2W	Moderate	Severe	Moderate	Moderate	Moderate	black spruce----- paper birch----- white spruce-----	71	2	---
226: TETLIN (85%)-----	2R	Severe	Severe	Moderate	Moderate	Moderate	black spruce----- paper birch----- white spruce-----	71	2	---
flooded areas (5%)-----	---	---	---	---	---	---	-----	---	---	---
227: TYPIC EUTROCRYEPTS (90%)	3R	Severe	Severe	Slight	Moderate	Slight	balsam poplar----- paper birch----- quaking aspen----- white spruce-----	51 86	2 3	---

WOODLAND MANAGEMENT AND PRODUCTIVITY--Continued
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Map symbol and soil name (% of map unit)	Ordi- nation symbol	Management concerns					Potential productivity			Suggested trees to plant
		Erosion hazard	Equip- ment limita- tion	Seedling mortal- ity	Wind- throw hazard	Plant competi- tion	Common trees	Site index	Volume of wood fiber m3/ha	
slopes less than 30 percent (3%)-----	---	---	---	---	---	---	-----	---	---	---
228: TYPIC EUTROCRYEPTS (90%)	3R	Severe	Severe	Slight	Moderate	Moderate	paper birch----- white spruce-----	51 85	2 3	---
229: TYPIC EUTROCRYEPTS (85%)	3R	Severe	Moderate	Slight	Moderate	Moderate	paper birch----- white spruce-----	51 85	2 3	---
Beales (5%)-----	2R	Severe	Moderate	Severe	Severe	Slight	balsam poplar----- black spruce----- paper birch----- quaking aspen----- white spruce-----	--- --- --- --- 72	--- --- --- --- 2	---
wet soils without permafrost (5%)-----	---	---	---	---	---	---	-----	---	---	---
wetter soils with permafrost (5%)-----	---	---	---	---	---	---	-----	---	---	---
230: TYPIC EUTROCRYEPTS (50%)	3R	Severe	Moderate	Slight	Moderate	Moderate	paper birch----- white spruce-----	51 85	2 3	---
TYPIC HISTOTURBELS (35%)	1W	Severe	Severe	Severe	Severe	Severe	black spruce----- paper birch----- white spruce-----	--- --- ---	--- --- ---	---
slopes greater than 35 percent (5%)-----	---	---	---	---	---	---	-----	---	---	---
wet soils without permafrost (5%)-----	---	---	---	---	---	---	-----	---	---	---

WOODLAND MANAGEMENT AND PRODUCTIVITY--Continued
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Map symbol and soil name (% of map unit)	Ordi- nation symbol	Management concerns					Potential productivity			Suggested trees to plant
		Erosion hazard	Equip- ment limita- tion	Seedling mortal- ity	Wind- throw hazard	Plant competi- tion	Common trees	Site index	Volume of wood fiber m3/ha	
231: TYPIC EUTROCRYEPTS (50%)	3R	Severe	Severe	Slight	Moderate	Moderate	paper birch----- white spruce-----	51 85	2 3	---
TYPIC AQUORTHELS (35%)--	1R	Severe	Moderate	Moderate	Moderate	Slight	black spruce----- paper birch----- white spruce-----	--- 38 64	--- 1 1	---
wet soils without permafrost (5%)-----	---	---	---	---	---	---	-----	---	---	---
232: VOLKMAR (85%)-----	2D	Slight	Moderate	Slight	Moderate	Slight	black spruce----- quaking aspen----- white spruce-----	--- --- ---	--- --- ---	white spruce
Chena (5%)-----	1F	Slight	Slight	Severe	Severe	Slight	balsam poplar----- paper birch----- quaking aspen----- white spruce-----	--- --- --- ---	--- --- --- ---	---
areas with rare flooding (5%)-----	---	---	---	---	---	---	-----	---	---	---
wet soils with permafrost (5%)-----	---	---	---	---	---	---	-----	---	---	---
233: WATER (100%)-----	---	---	---	---	---	---	-----	---	---	---